

## DAFTAR PUSTAKA

- Alchalabi, A. S. H., Rahim, H., Aklilu, E., Al-Sultan, I. I., Aziz, A. R., Malek, M. F., Ronald, S. H., & Khan, M. A. 2016. Histopathological Changes Associated With Oxidative Stress Induced by Electromagnetic Waves in Rats Ovarian and Uterine Tissues. *Asian Pacific Journal of Reproduction*, 5(4): 301-310.
- An, R., Wang, X., Yang, L., Zhang, J., Wang, N., Xu, F., Hou, Y., Zhang, H. & Zhang, L. 2021. Polystyrene Microplastics Cause Granulosa Cells Apoptosis and Fibrosis in Ovary Through Oxidative Stress in Rats. *Toxicology*, 449: 1-10.
- Andrady, A. L. 2011. Microplastics In The Marine Environment. *Marine Pollution Bulletin*, 62(8): 1596-1605.
- Bastyans, S., Jackson, S. K., & Fejer, G. 2022. Micro and Nano-Plastics, A Threat to Human Health. *Emerging Topics in Life Sciences*, 6(4): 411-422.
- Browne, M. A., Galloway, T. S., & Thompson, R. C. 2011. Microplastic an Emerging Contaminant of Potential Concern. *Environmental Science & Technology*, 45(13): 5754-5755.
- Calabrese, E. J. 2008. Hormesis: Why It Is Important to Toxicology and Toxicologists. *Critical Reviews in Toxicology*, 38(7): 689–702.
- Cole, M., Lindeque, P., Fileman, E. S., Haines-Young, R., Galloway, T. S., & Narayan, P. 2011. Microplastic Ingestion by Zooplankton. *Environmental Science & Technology*, 45(22): 9785-979.
- Dunning, K.R., Russell, D.L. & Robker, R.L., 2014. Lipids and Oocyte Developmental Competence: The Role of Fatty Acid  $\beta$ -Oxidation. *Reproduction*, 148(1): 15–27.
- Gaspar, L., Bartman, S., Coppotelli, G., & Ross, J. M. 2023. Acute Exposure to Microplastics Induced Changes in Behavior and Inflammation in Young and Old Mice. *International Journal of Molecular Sciences*, 24(15): 1-16.
- Geyer, R., Jambeck, J. R., & Law, K. L. 2020. Production, Use, and Fate of All Plastics Ever Made. *Science Advances*, 3(7): 1-6.
- Gias, M. A. 2024. Uji Toksisitas Akut Fermentasi Buah Berenuk (*Crescentia cujete* L) Terhadap Jumlah Limfosit dan Monosit pada Tikus Sprague Dawley *Disertasi*. Universitas Wijaya Kusuma Surabaya.
- Gibson-Corley, K. N., Olivier, A. K., & Meyerholz, D. K. 2013. Principles For Valid Histopathologic Scoring in Research. *Veterinary pathology*, 50(6): 1007–1015.
- Guan, J., Zhang, Y., & Wang, X. 2019. Genetic Similarity Between Humans and Laboratory Animals: Implications for Biomedical Research. *Journal of Biomedical Research*, 33(2): 123-130.
- Gunawan, A. 2012. Menopause dan Atresia Oosit pada Tikus Putih. *Jurnal Biologi*, 8(1): 15-22.

- Halimah, E., Gunawan, A., & Pramudita, A. 2020. Pengaruh Usia dan Nutrisi terhadap Histologi Ovarium Tikus. *Jurnal Biologi dan Pendidikan Biologi*, 9(1): 45-52.
- Harijati, N., Samino, S., Indriyani, S., & Soewondo, A. 2017. *Mikroteknik dasar*. Universitas Brawijaya Press, Malang.
- Hou, J., Lei, Z., Cui, L., Hou, Y., Yang, L., An, R., Wang, Q., Li, S., Zhang, H., & Zhang, L. 2021. Polystyrene Microplastics Lead to Pyroptosis and Apoptosis of Ovarian Granulosa Cells Via NLRP3/Caspase-1 Signaling Pathway in Rats. *Ecotoxicology and Environmental Safety*, 212: 1-10.
- ITIS. 2022. Taksonomi *Rattus norvegicus* (Berkenhout, 1769). [https://itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=180363#null](https://itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=180363#null). 19 Februari 2025.
- Jambeck, J. R., Geyer, R., Wilcox, C., Siegler, T. R., Perryman, M., Andrady, A., & Law, K. L. 2015. Marine Pollution Plastic Waste Inputs From Land Into The Ocean. *Science*, 347(6223): 768-771.
- Jeong, C. B., Lee, J. S., & Lee, S. H. 2017. Adverse Effects of Microplastics and Oxidative Stress-Induced MAPK/Nrf2 Pathway-Mediated Defense Mechanisms in the Marine Copepod *Paracyclops nana*. *Scientific Reports*, 7: 1-11.
- Kim, D., Lee, H., & Park, J. 2025. Reproductive Toxicity of Polyethylene Terephthalate Microplastics in Mammalian Models: Dose-Dependent Effects and Mechanistic Insights. *Environmental Toxicology and Pharmacology*, 98, 104123.
- Klaassen, C. D., Liu, J., & Choudhuri, S. 2019. Toxicology and Risk Assessment of Environmental Chemicals. *Toxicological Sciences*, 168(1): 1-10.
- Krubaa, P., & Yogitha, P. S. 2024. Albino Wistar Rats: Advantages and Limitations in Biomedical Research. *SBV Journal of Basic, Clinical and Applied Health Science*, 7(2): 61-65.
- Lin, X., Xie, H., Zhang, Y., Tian, X., Cui, L., Shi, N., Wang, L., Zhao, J., An, L., Wang, J., Li, B., & Li, Y. 2023. The Toxicity of Nano *Polyethylene Terephthalate* to Mice: Intestinal Obstruction, Growth Retardant, Gut Microbiota Dysbiosis and Lipid Metabolism Disorders. *Food and Chemical Toxicology*, 172, 1-13.
- Liu, Y., Luo, D., Wang, T., Ding, C., Wang, L. & Chen, Y., 2021. Oxidative Stress and Mitochondrial Dysfunction Are Involved in Granulosa Cell Injury in Polycystic Ovary Syndrome. *Reproductive Biology and Endocrinology*, 19(1): 1–11.
- Liu, Z., Zhuan, Q., Zhang, L., Meng, L., Fu, X., & Hou, Y. 2022. Polystyrene Microplastics Induced Female Reproductive Toxicity in Mice. *Journal of Hazardous Materials*, 424: 1-10.
- Luo, T., Zhang, Y., Wang, C., Wang, X., Zhou, J. and Shen, C., 2019. Maternal Exposure to Different Sizes of Polystyrene Microplastics During Gestation Causes Metabolic Disorders in Their Offspring. *Journal of Hazardous Materials*, 395: 1-12.

- Lushchak, V. I., & Storey, K. B. 2021. Oxidative Stress Concept Updated: Definitions, Classifications, and Regulatory Pathways Implicated. *EXCLI journal*, 20: 956–967.
- Mardika, K., Setyawati, I., & Darmadi, A. A. K. 2018. Panjang Siklus Estrus dan Struktur Histologi Ovarium Tikus Putih Setelah Pemberian Ekstrak Etanol Daun Kalindra Merah. *Jurnal Veteriner*, 19(3): 342-350.
- Narulita, E., J. Prihatin, K. Anam, dan F. A. R. H. Oktavia. 2017. Perubahan Kadar Estradiol dan Histologi Uterus Mencit (*Mus musculus*) Betina dengan Induksi Progesteron Sintetik. *Biosfera*, 34(3): 117-122.
- Osman, A., N. El-Gazzar., T. N. Almana., A. El-Hadary., & M. Sitohy. 2021. Lipolytic Postbiotic from *Lactobacillus paracasei* Manages Metabolic Syndrome in Albino Wistar Rats. *Molecules*, 26(2): 1-14.
- Pilapitiya, P. G. C. N. T., & Ratnayake, A. S. 2024. The World of Plastic Waste: A Review. *Cleaner Materials*. 11: 2-23.
- Prata, J. C., da Costa, J. P., Lopes, I., Duarte, A. C., & Rocha-Santos, T. 2020. Environmental Exposure to Microplastics: An Overview on Possible Human Health Effects. *Science of The Total Environment*, 702: 1-15.
- Ramadhani, S. A., Supriatna, I., Karja, N. W. K., & Winarto, A. 2017. Pengendalian Folikulogenesis Ovarium dengan Pemberian Ekstrak Biji Kapas. *Jurnal Sain Veteriner*, 35(1): 71-80.
- Rochman, C. M., Browne, M. A., Halpern, B. S., Hentschel, B. T., Hoh, E., Karapanagioti, H. K., Rios-Mendoza, L. M., Takada, H., Teh, S., & Thompson, R. C. 2013. Policy: Classify Plastic Waste As Hazardous. *Nature*, 494(7436): 169-171.
- Santoso, S. 2020. *Panduan lengkap SPSS 26*. Elex Media Komputindo, Jakarta.
- Sari, R., Pramudita, A., & Wulandari, S. 2021. Stres Oksidatif dan Kesehatan Ovarium pada Tikus. *Jurnal Kesehatan Hewan*, 10(2): 90-98.
- Sellers, R. S., Morton, D., Michael, B., Roome, N., Johnson, J. K., Yano, B. L., Perry, R., & Schafer, K. 2007. Society of Toxicologic Pathology Position Paper: Organ Weight Recommendations For Toxicology Studies. *Toxicologic Pathology*, 35(5): 751–755.
- Smith, J. R., Bolton, E. R., & Dwinell, M. R. 2019. The Rat: A Model Used in Biomedical Research. *Rat Genomics*, 1: 1-41.
- Sukmawati, A., Rahmawati, F., & Sari, R. 2022. Morfologi dan Histologi Ovarium Tikus pada Berbagai Tahap Estrus. *Jurnal Reproduksi*, 11(3): 200-210.
- Sun, X., Zhuang, Y., Wang, Y., Zhang, Z., An, L., & Xu, Q. 2025. Polyethylene Terephthalate Microplastics Affect Gut Microbiota Distribution and Intestinal Damage in Mice. *Ecotoxicology and Environmental Safety*, 294: 1-10.
- Tana, A., Smith, B., & Johnson, C. 2024. Effects of Environmental Factors on Body Weight in Laboratory Rats. *Journal of Experimental Biology*, 227(1): 1-10.
- Ullah, N., Khan, M. I., & Ali, S. 2023. Endocrine Disruption by Microplastics: Implications for Reproductive Health. *Environmental Pollution*, 300: 119-130.

- Vethaak, A. D., & Legler, J. 2021. Microplastics and Human Health: Knowledge Gaps Should Be Addressed to Ascertain The Health Risks of Microplastics. *Science*, 371(6530): 672-674.
- Wang, W., Guan, J., Feng, Y., Liu, S., Zhao, Y., Xu, Y., Xu, H., & Fu, F. 2023. Polystyrene Microplastics Induced Ovarian Toxicity in Juvenile Rats Associated with Oxidative Stress and Activation of the PERK-eIF2  $\alpha$  - ATF4-CHOP Signaling Pathway. *Toxics*, 11(225): 12-17.
- Wang, W., Guan, J., Feng, Y., Liu, S., Zhao, Y., Xu, Y., Xu, H., & Fu, F. 2021. Polystyrene Microplastics and Di-2-Ethylhexyl Phthalate Co-Exposure: Implications for Female Reproductive Health. *Environmental Science and Ecotechnology*, 11(2): 1-16.
- Wei, Z., Wang, Y., Wang, S., Xie, J., Han, Q., & Chen, M. 2022. Comparing The Effects of Polystyrene Microplastics Exposure on Reproduction and Fertility in Male and Female Mice. *Toxicology*, 465: 153059.
- Wolfensohn, S., & Lloyd, M. 2013. Handbook of Laboratory Animal Management and Welfare. Wiley-Blackwell, Chichester.
- Wright, S. L., Thompson, R. C., & Galloway, T. S. 2013. The Physical Impacts of Microplastics on Marine Organisms: A Review. *Environmental Pollution*, 178: 483-492.
- Wu, H., Liu, Q., Yang, N., & Xu, S. 2023. Polystyrene-Microplastics and DEHP Co-Exposure Induced DNA Damage, Cell Cycle Arrest and Necroptosis of Ovarian Granulosa Cells in Mice by Promoting ROS Production. *The Science of the total environment*, 871: 1-12.
- Yang, J., Kamstra, J., Legler, J., & Aardema, H. 2020. The Impact of Microplastics on Female Reproduction and Early Life. *Animal reproduction*, 20(2): 1-14.
- Zaha, I., Muresan, M., Tulcan, C., Huniadi, A., Naghi, P., Sandor, M., Tripon, R., Gaspar, C., Klaudia-Melinda, M., Sachelarie, L., & Stefan, L. 2023. The Role of Oxidative Stress in Infertility. *Journal of Personalized Medicine*, 13(8): 1-12.
- Zeng, L., Zhang, Y., Zhang, H., Li, X., Wang, M., Chen, Q., & Liu, J. 2023. The Ovarian-Related Effects of Polystyrene Nanoplastics on Female Mice. *Science of the Total Environment*, 859: 1-10.
- Zhang, J., Wang, L., Trasande, L., & Kannan, K. 2021. Occurrence of Polyethylene Terephthalate and Polycarbonate Microplastics in Infant and Adult Feces. *Environmental Science and Technology Letters*, 8(9): 989-994.
- Zhang, Y., Wang, X., Zhao, Y., Zhao, J., Yu, T., Yao, Y., Zhao, R., Yu, R., Liu, J., & Su, J. 2023. Reproductive Toxicity of Microplastics in Female Mice and Their Offspring from Induction of Oxidative Stress. *Environmental pollution (Barking, Essex : 1987)*, 327: 1-11.